Notice of Allowability	Application No.	Applicant(s)	
	09/538,570	REBANE, GEORGE J.	
	Examiner	Art Unit	
	Andre Boyce	3623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *Applicant's Appeal Brief filed May 9, 2005*.

2. ☒ The allowed claim(s) is/are *1,2,4,5,7-11,13-20,22-24,27,31,51,54,55,57,58,60,62-67 and 89-105*.

3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a) ☐ All b) ☐ Some* c) ☐ None of the:
      1. ☐ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
      3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☒ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   (a) ☒ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      1) ☒ hereto or 2) ☐ to Paper No./Mail Date _____.
   (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☒ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☑ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

TARIQ R. HAFIZ
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600

DETAILED ACTION

1. The following is in response to Applicant's Appeal Brief filed May 9, 2005. Claims 1-11,13-20, 22-24, 27, 31, 51, 53-55, 57, 58, 60, 62-67 and 89-95 are pending.

2. The previously pending rejections to claims 4-6, 8-11,13-17, 22-24, 27, and 31 under 35 U.S.C. 112, second paragraph have been withdrawn.

The previously pending rejections to claims 89-95 under 35 U.S.C. 101 have been withdrawn.

Examiner's Amendment

3. An Examiner's Amendment to the record appears below. Should changes and/or additions be unacceptable to Applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

4. Authorization for this Examiner's Amendment was given in a telephone interview with Bradley Ganz on September 30, 2005. The application has been amended as follows:

In the claims:

1. (amended) A system, comprising:

a plurality of processing modules configured for performing a predefined set of operations on data received from a data source, at least two processing modules being selected from the group consisting of: a data stabilizer processing module for smoothing noisy or variable data using a computational solution of a minimum variance Bayesian estimation method; a saturation limited forecasting module (SLF) for using available historical or recently captured data along with an estimated and/or available saturation population function as the basis for an algorithm that defines the growth of the population to a maximum attainable level; a dynamic activity-level icon module for iconically indicating to the user of a remote computer system relative levels of activity at network sites for different merchants offering competitive goods or services; and an alarm filter module for monitoring data rates and sending a signal based on deviations from desired thresholds from a normative rate; ~~and~~

wherein at least one of the at least two selected processing modules is the data stabilizer processing module or the saturation limited forecasting module;

wherein the SLF module uses a pull function $P_0(t)$ which sets a population's saturation limit to growth and a penetration function r(t) which characterizes the total level of effort process, the SLF forecasting the value of a population for a given time; and

wherein the system is configured for presenting selected items of data following the sequential processing of data by the at least two selected processing modules[[.]]; and

wherein the system is adapted to receive and process data related to an online e-commerce transaction.

3. (canceled)

4. (amended) The system of claim 1 wherein at least three of said processing modules are selected and the ~~presentation server is~~ system is configured for presenting selected items of data following the sequential processing of data by the at least three selected processing modules.

5. (amended) The system of claim 1 wherein four of the processing modules are selected and the ~~presentation server is~~ system is configured for presenting selected items of data following the sequential processing of data by the at least four selected processing modules.

6. (canceled)

7. (amended) The system of claim [[3]]1 wherein at least three of said processing modules are selected.

8. (amended) A system, comprising:

a plurality of processing modules configured for performing a predefined set of operations on data relating to e-commerce transaction received from a first plurality of remote computer systems, at least two processing modules being selected from the group consisting of: a data stabilizer processing module for smoothing noisy or variable data using a computational solution of a minimum variance Bayesian estimation method; a saturation limited forecasting (SLF) module for using available historical or recently captured data along with an estimated and/or available saturation population function as the basis for an algorithm that defines the growth of the population to a maximum attainable level; a dynamic activity-level icon module for iconically indicating to the user of a remote computer system a level of activity at each of a plurality of merchant network sites, the dynamic activity-level icon module automatically causing the indication of activity to be sent to the remote computer system upon user access to an electronic page comprising a listing of a plurality of merchants; and an alarm filter module for monitoring data rates

and sending a signal based on deviations from desired thresholds from a normative rate; ~~and~~

wherein at least one of the at least two selected processing modules is the data stabilizer processing module or the saturation limited forecasting module;

wherein the SLF module uses a pull function $P_0(t)$ which sets a population's saturation limit to growth and a penetration function r(t) which characterizes the total level of effort process, the SLF forecasting the value of a population for a given time; and

wherein the system is configured to present to a second plurality of remote computer systems via a computer network a set of items or data generated from the sequential processing of the data by the at least two processing modules.

51. (amended) A computer implemented method, comprising:

capturing data from a [[a]] first plurality of remote computers systems over the Internet;

performing a predefined set of operations on data received from the first plurality of computer systems at least two processing modules being selected from the group consisting of: a data stabilizer processing module for smoothing noisy or variable data using a computational solution of a minimum variance Bayesian estimation

method; a saturation limited forecasting (SLF) module for using available historical or recently captured data along with an estimated and/or available saturation population function as the basis for an algorithm that defines the growth of the population to a maximum attainable level; a dynamic activity-level icon module for iconically indicating to the user of a remote computer system a level of activity at each of a plurality of merchant network sites, the module automatically causing the indication of activity to be sent to the remote computer system upon user access to an electronic page comprising a listing of a plurality of merchants; and an alarm filter module for monitoring data rates and sending a signal based on deviations from desired thresholds from a normative rate, the one or more processing modules outputting processed data or information; and

presenting selected items of processed data or information following the sequential processing of the data using the at least two processing modules,

wherein at least one of the at least two selected processing modules is the data stabilizer processing module or the saturation limited forecasting module,

wherein the SLF module uses a pull function $P_0(t)$ which sets a population's saturation limit to growth and a penetration function r(t)

which characterizes the total level of effort process, the SLF forecasting the value of a population for a given time, and wherein the captured data relates to e-commerce transactions.

53. (canceled)

54. (amended) The method of claim [[53]]51 wherein the e-commerce transactions comprise consumer-merchant transactions.

55. (amended) The method of claim [[53]]51 wherein the e-commerce transactions comprise business to business transactions.

63. (amended) The method of claim 62 wherein the first plurality ~~ofcomputer~~ of computer systems comprise a plurality of consumer computer systems and the survey data relates to an online transaction ~~betweena~~ between a consumer and a merchant.

64. (amended) The method of claim 54 wherein the first ~~plularity~~ plurality of computer systems comprise one or more merchant computer systems.

89. (amended) A presentation server that includes web pages containing data or information that has been derived from at least two processing modules selected from the group consisting of: a data stabilizer processing module

for smoothing noisy or variable data using a computational solution of a minimum variance Bayesian estimation method; a saturation limited forecasting (SLF) module for using available historical or recently captured data along with an estimated and/or available saturation population function as the basis for an algorithm that defines the growth of the population to a maximum attainable level; a dynamic activity-level icon module for iconically indicating to the user of a remote computer system a level of activity at each of a plurality of merchant network sites, the module automatically causing the indication of activity to be sent to the remote computer system upon user access to an electronic page comprising a listing of a plurality of merchants; and an alarm filter module for monitoring data rates and sending a signal based on deviations from desired thresholds from a normative rate,

the web pages being accessible to a plurality of remote merchant systems over a computer network,

wherein at least one of the at least two selected processing modules is the data stabilizer processing module or the saturation limited forecasting module,

and wherein the SLF module uses a pull function $P_0(t)$ which sets a population's saturation limit to growth and a penetration function r(t) which characterizes the total level of effort process, the SLF forecasting the value of a population for a given time.

90. (amended) A presentation server that includes web pages containing data or information that has been derived from at least two processing modules selected from the group consisting of: a data stabilizer processing module for smoothing noisy or variable data using a computational solution of a minimum variance Bayesian estimation method; a saturation limited forecasting (SLF) module for using available historical or recently captured data along with an estimated and/or available saturation population function as the basis for an algorithm that defines the growth of the population to a maximum attainable level; a dynamic activity-level icon module for iconically indicating to the user of a remote computer system a level of activity at each of a plurality of merchant network sites, the module automatically causing the indication of activity to be sent to the remote computer system upon user access to an electronic page comprising a listing of a plurality of merchants; and an alarm filter module for monitoring data rates and sending a signal based on deviations from desired thresholds from a normative rate,

the web pages being accessible to a plurality of remote consumer computer systems over a computer network,

wherein at least one of the at least two selected processing modules is the data stabilizer processing module or the saturation limited forecasting module,

and wherein the SLF module uses a pull function $P_0(t)$ which sets a population's saturation limit to growth and a penetration function r(t) which characterizes the total level of effort process, the SLF forecasting the value of a population for a given time.

96. (new) The system of claim 1 wherein the at least one of the at least two selected processing modules is the data stabilizer processing module.

97. (new) The system of claim 1 wherein the at least one of the at least two selected processing modules is the saturation limited forecasting module.

98. (new) The system of claim 8 wherein the at least one of the at least two selected processing modules is the data stabilizer processing module.

99. (new) The system of claim 8 wherein the at least one of the at least two selected processing modules is the saturation limited forecasting module.

100. (new) The system of claim 51 wherein the at least one of the at least two selected processing modules is the data stabilizer processing module.

101. (new) The system of claim 51 wherein the at least one of the at least two selected processing modules is the saturation limited forecasting module.

102. (new) The system of claim 89 wherein the at least one of the at least two selected processing modules is the data stabilizer processing module.

103. (new) The system of claim 89 wherein the at least one of the at least two selected processing modules is the saturation limited forecasting module.

104. (new) The system of claim 90 wherein the at least one of the at least two selected processing modules is the data stabilizer processing module.

105. (new) The system of claim 90 wherein the at least one of the at least two selected processing modules is the saturation limited forecasting module.

Reasons for Allowance

5. Claims 1, 2, 4, 5, 7-11, 13-20, 22-24, 27, 31, 51, 54, 55, 57, 58, 60, 62-67, and 89-105 are allowed.

6. The following is an examiner's statement of reasons for allowance:

With respect to independent claims 1, 8, 51, 89, and 90, none of the prior art of record, taken individually or in any combination, teach inter alia, a data stabilizer processing module for smoothing noisy or variable data using a computational solution of a minimum variance Bayesian estimation method; or a saturation limited forecasting (SLF) module for using available historical or recently captured data along with an estimated and/or available saturation population function as the basis

for an algorithm that defines the growth of the population to a maximum attainable level, and wherein the SLF module uses a pull function $P_0(t)$ which sets a population's saturation limit to growth and a penetration function r(t) which characterizes the total level of effort process, the SLF forecasting the value of a population for a given time.

The prior art references most closely resembling Applicant's claimed invention are Papierniak et al (USPN 6,128,624), Lee et al (US 2002/0072951), Abu El Ata (USPN 6,560,569), and Sundaresan (USPAP 2003/0033299).

Papierniak et al disclose a data warehouse that extracts data from web logs and various business operational databases, including a mapping module to collect, interpret, analyze, translate, refine, and correlate customer internet usage. However, Papierniak et al does not disclose a data stabilizer processing module for smoothing noisy or variable data using a computational solution of a minimum variance Bayesian estimation method, or a saturation limited forecasting (SLF) module for using available historical or recently captured data along with an estimated and/or available saturation population function as the basis for an algorithm that defines the growth of the population to a maximum attainable level, and wherein the SLF module uses a pull function $P_0(t)$ which sets a population's saturation limit to growth and a penetration function r(t) which characterizes the total level of effort process, the SLF forecasting the value of a population for a given time.

Lee et al disclose a data mart builder for collecting, analyzing, and presenting data, by extracting input data from an input database, wherein the extracted data is

transformed into a suitable schema. However, Lee et al does not disclose a data stabilizer processing module for smoothing noisy or variable data using a computational solution of a minimum variance Bayesian estimation method, or a saturation limited forecasting (SLF) module for using available historical or recently captured data along with an estimated and/or available saturation population function as the basis for an algorithm that defines the growth of the population to a maximum attainable level, and wherein the SLF module uses a pull function $P_0(t)$ which sets a population's saturation limit to growth and a penetration function r(t) which characterizes the total level of effort process, the SLF forecasting the value of a population for a given time.

Abu El Ata discloses estimates for business volume and growth, wherein these estimates may include the number of transactions per business process, the weight of transaction type per business process, and the growth in business volume per year. However, Abu El Ata does not disclose a data stabilizer processing module for smoothing noisy or variable data using a computational solution of a minimum variance Bayesian estimation method or a saturation limited forecasting (SLF) module for using available historical or recently captured data along with an estimated and/or available saturation population function as the basis for an algorithm that defines the growth of the population to a maximum attainable level, and wherein the SLF module uses a pull function $P_0(t)$ which sets a population's saturation limit to growth and a penetration function r(t) which characterizes the total level of effort process, the SLF forecasting the value of a population for a given time.

Sundaresan discloses an on-line indexing engine, a query transformer, a search results transformer, a ranking based result sorter, and a metadata repository, wherein a crawler visits and downloads web documents to the metadata repository, where they are stored and updated systematically. However, Sundaresan does not disclose a data stabilizer processing module for smoothing noisy or variable data using a computational solution of a minimum variance Bayesian estimation method or a saturation limited forecasting (SLF) module for using available historical or recently captured data along with an estimated and/or available saturation population function as the basis for an algorithm that defines the growth of the population to a maximum attainable level, and wherein the SLF module uses a pull function $P_0(t)$ which sets a population's saturation limit to growth and a penetration function r(t) which characterizes the total level of effort process, the SLF forecasting the value of a population for a given time.

7. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andre Boyce whose telephone number is (571) 272-6726. The examiner can normally be reached on 9:30-6pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on (571) 272-6729. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

adb
September 30, 2005

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